

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 (Currently amended) A pattern forming method comprising:

forming a liquid-repellent thin film to a liquid composition on an insulating surface;

irradiating a selected portion of the liquid-repellent thin film with plasma from a first nozzle

so that the selected portion has a liquid affinity to the liquid composition; and

forming a pattern by applying a liquid drop comprising the liquid composition to the selected portion from a second nozzle surface.

2 (Currently amended). A pattern forming method comprising:

forming a thin film having an affinity for a liquid composition on an insulating surface;

selectively forming a groove or a hole in a surface of the thin film by selectively treating the thin film with a plasma from a first nozzle; and

forming a pattern by applying a liquid drop comprising the liquid composition to the groove or the hole in the thin film from a second nozzle.

3 (Previously Presented). A pattern forming method according to claim 1, wherein the liquid drop composition is selected from the group consisting of a conductive material, a resist material, a polymer material and a light emitting material.

4 (Original). A pattern forming method according to claim 1, wherein the liquid-repellent thin

film is selected from the group consisting of a semiconductor film, a conductive film and a polymer film.

5 (Original). A pattern forming method according to claim 2, wherein the thin film having affinity for liquid is selected from the group consisting of a silicon oxide film, silicon nitride film, a silicon oxynitride film and a metal oxide film.

6 (Previously Presented). A pattern forming method according to claim 1, wherein the irradiation of the plasma is performed at a pressure in a range of 1.3×10^1 to 1.31×10^5 Pa.

7 (Previously Presented). A pattern forming method according to claim 1, wherein a contact angle θ of the surface having affinity for liquid is $0^\circ \leq \theta < 10^\circ$, and a contact angle θ of the liquid-repellent surface is $10^\circ \leq \theta < 180^\circ$.

8-15 (Canceled).

16 (Previously Presented). A pattern forming method according to claim 2, wherein the liquid drop composition is selected from the group consisting of a conductive material, a resist material, a polymer material and a light emitting material.

17 (Previously Presented). A pattern forming method according to claim 2, wherein the treatment of the thin film with the plasma is performed at a pressure in a range of 1.3×10^1 to $1.31 \times$

10^5 Pa.

18 (Previously Presented). A pattern forming method according to claim 2, wherein a contact angle θ of the surface having affinity for liquid is $0^\circ \leq \theta < 10^\circ$.

19-22 (Canceled).

23. (Currently amended) A pattern forming method comprising:

irradiating a selected portion of a surface with plasma of a gas from a first nozzle so that the selected portion has a liquid affinity to a liquid composition comprising a conductive material; and

forming a conductive pattern by applying a liquid drop comprising the liquid composition to the selected portion from a second nozzle;

forming a mask pattern of a resist over the conductive pattern; and

forming a wiring by etching the conductive pattern using the mask pattern.

24. (Previously Presented) A pattern forming method according to claim 23 wherein the gas is selected from the group consisting of He, Ne, Ar, Kr, Xe, oxygen, nitrogen and a combination thereof.

25. (Currently amended) A pattern forming method according to claim 23 wherein the mask pattern is formed by ~~applying~~ selectively applying the resist to the conductive pattern through a nozzle.

26. (Currently amended) A pattern forming method comprising:
forming a groove in a surface by selectively treating the surface with plasma of a gas from a first nozzle; and
forming a conductive pattern by applying a liquid drop composition comprising a conductive material to the groove from a second nozzle;

forming a mask pattern of a resist over the conductive pattern; and
forming a wiring by etching the conductive pattern using the mask pattern.

27. (Previously Presented) A pattern forming method according to claim 26 wherein the gas is selected from hydrogen, CF₄, NF₃, SF₆, oxygen and a combination thereof.

28. (Previously Presented) A pattern forming method according to claim 26 wherein the mask pattern is formed by selectively applying the resist to the conductive pattern through a nozzle.

29. (Previously Presented) A pattern forming method according to claim 1, wherein the application of the liquid drop composition is performed at a pressure in a range of 1.3×10^1 to 1.31×10^5 Pa.

30. (Previously Presented) A pattern forming method according to claim 2, wherein the application of the liquid drop composition is performed at a pressure in a range of 1.3×10^1 to 1.31×10^5 Pa.

10^5 Pa.